

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 1 recites the limitation "said call center" in line 6. There is insufficient antecedent basis for this limitation in the claim.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Although the specification states "It is contemplated that the control center can compare the received GPS signals with preprogrammed route information." (paragraph 0015), it's never stated that the control center receives information from the vehicle that is actually "downloaded" to define vehicle routing information.

Claim Objections

6. Claim 18 is objected to because of the following informalities: the claimed "FOG" should be changed to "FOB".

Claim 23, line 2, the claimed "batter" should be changed to "battery".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2, 6-9, 11-16 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over McElroy et al. (US Pat. 5,835,868) in view of Borugian (US Pat. 7,119,696 B2).

In reference to claims 1, 7, 9, 25, McElroy discloses a) the onboard computer, which is met by automated system 100 including a central controller 102 employed in a motor vehicle (col. 5, lines 3-45), b) the claimed communications system linked to the onboard computer, the communications system capable of communicating by way of a telecommunications link, which is met by the central control 102 is capable of transmitting an external triggering device 104 located remote from the vehicle via RF link, mobile telephone frequency link or any mobile electromagnetic data transmission

network (col. 9, lines 5-33), and c) the claimed onboard computer includes means for acting on a shutdown command, and means for interrupting a throttle command signal generated by a throttle position sensor, which is met by central control 102 including input/output ports 128 to collect data from throttle actuator module 118 as well as provide a signal to throttle 118 to disable the vehicle's throttle such that the vehicle slows down. The throttle arm 146 is not operated and the fuel delivered to the engine is sufficient only to sustain an idle (col. 14, lines 32-56). Although McElroy does not specifically disclose the claimed communications system capable of communicating with a remote control center and the shutdown command being sent from a call center, he does disclose an external triggering device 104 capable of transmitting a signal from outside of the vehicle to the vehicle via RF, mobile telephone frequency link or any mobile electromagnetic data transmission network to have the vehicle disabled (col. 9, lines 5-33). Borugian discloses a vehicle monitoring system comprising a central control 28 that monitors various information with respect to an onboard computer 18 or a tractor trailer 16a. The central control 28 can remotely transmit a disabling command to the tractor trailer 16a (Figures 1-3; col. 6, lines 17-67; col. 7, lines 1-20). Since both McElroy and Borugian disclose vehicle disabling systems in which the vehicle receives a signal from a remote location, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of sending a disabling signal from a remote control center (or call center), as disclosed by Borugian, to allow any number of vehicles to be monitored simultaneously as well as allow various command signals to be transmitted to any number of vehicles for disabling purposes.

In reference to claim 2, McElroy discloses the claimed communications system includes a wireless modem, which is met by an external triggering device 104 capable of transmitting a signal from outside of the vehicle to the vehicle via RF, mobile telephone frequency link or any mobile electromagnetic data transmission network to have the vehicle disabled (col. 9, lines 5-33).

In reference to claim 6, McElroy discloses the claimed vehicle disable system further including at least a keyboard input linked coupled to the onboard computer, which is met by a reset keypad/receiver 106 (col. 5, lines 12-33).

In reference to claim 8, McElroy discloses the claimed serial communications link, which is met by wired central control 102 including input/output ports 128 corresponding to one of the plurality of monitored devices (col. 5, lines 64-67; col. 6, lines 1-12; Figure 1).

In reference to claims 11-13, McElroy does not disclose the claimed step of receiving information into a control center includes receiving information from a vehicle operator. Borugian discloses a system in which the vehicle operator enters an identification code that is then transmitted to the central control 28 (control center) such that the central control 28 verifies the information entered by the driver (col. 7, lines 31-67; col. 8, lines 1-10). The driver identification includes GPS information (Fig. 1; col. 16, lines 28-47).

Since both McElroy and Borugian disclose vehicle disablement systems that include wireless communication systems in which a remote device or station communicate with the vehicle, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known bidirectional communication between the driver and a control center, as disclosed by Borugian, to provide assistance to the driver upon a detected emergency condition.

In reference to claims 14-16, McElroy does not specifically disclose the claimed method of receiving information into a control center and receiving information including downloading to the control center a predetermined protocol defining vehicle and further including downloading vehicle routing information to the vehicle security system. Borugian discloses a vehicle with an onboard computer 18, which determines that the driver is not authorized, but the tractor trailer 16a, 16b has not deviated from the authorized route, the system 10 asks the driver to enter an authorized driver code or voluntarily shut down the vehicle within a given period of time 82. The central control 28 is notified that the driver is not authorized by a message that it sent from the vehicle 12 through the satellite communications unit 26 in the exemplary embodiment (col. 10, lines 9-29). Since both McElroy and Borugian disclose vehicle systems that remotely transmit disabling signals to the vehicle based on sensed conditions, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of monitoring the vehicle's route and download the route information to the control center, as the route information is transmitted to the central control 28 in

Borugian, in order to determine whether the vehicle should be disabled based on the driver complying with the rules set forth previously with respect to the route that should be driven.

9. Claims 3-5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over McElroy et al. in view of Borugian as applied to claim 1 above, and further in view of Menard et al. (US Pat. 6,563,910 B2).

In reference to claims 3-5, 10, neither McElroy nor Borugian disclose the claimed onboard computer including an Internet connection and web server with a web page. Menard discloses a vehicle monitoring system in which a vehicle can be disabled remotely and a user is capable of monitoring the vehicle via Internet that can be accessed from a database posted on the web and monitor at a web site (col. 8, lines 46-67). Since both McElroy and Borugian disclose vehicle disabling systems in which the vehicle receives a remote signal that may be of radio, mobile telephone or any mobile electromagnetic data transmission network, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of using a web server, as disclosed by Menard, with both McElroy and Borugian, to provide easy access to subscribers of a network that will allow multiple users to monitor vehicles as well as have control of the operation of the vehicles.

10. Claims 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borugian in view of McElroy.

In reference to claims 17, Borugian discloses the claimed method including the steps of a) receiving a signal initiated by the vehicle driver, b) checking the validity of the signal according to a predetermined protocol; and c) incapacitating the vehicle if the step of checking the validity of the signal violates the terms of the predetermined protocol, which is met by a driver is to enter a code into a computer 18 on tractor 16a, the computer determines whether the code is correct and if it isn't will transmit a signal to the central control 28, which will then transmit a signal to disable the vehicle such as fuel shut-off, ignition disabling (col. 3, lines 54-67; col. 7, lines 58-67; col. 8, lines 1-4). Borugian does not specifically disclose the claimed step of forcing the vehicle engine into an idle mode. McElroy discloses a central control 102 including input/output ports 128 to collect data from throttle actuator module 118 as well as provide a signal to throttle 118 to disable the vehicle's throttle such that the vehicle slows down. The throttle arm 146 is not operated and the fuel delivered to the engine is sufficient only to sustain an idle (col. 14, lines 32-56). Since both Borugian and McElroy disclose vehicle disabling systems in which a vehicle receives a disabling signal from a remote location, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of forcing the vehicle engine into idle mode, as disclosed by McElroy, to ensure safety measures while the driver is behind the wheel and reduce the likelihood of accidents with nearby vehicles.

In reference to claim 18, Borugian discloses the claimed signal is initiated by the driver by way of using a remote FOB transmitter, which is met by the driver may be identified by a bar code, a smart key or manual entry of the driver identification number (col. 16, lines 28-47).

In reference to claims 19, 20, 22, Borugian discloses the claimed signal is initiated by the driver by way of an input device to input an ID number, which is met by driver enters a driver identification code at 58, which are randomly generated number is flashed on the display 20 at 60 (col. 7, lines 21-31).

In reference to claim 21, although Borugian does not specifically disclose the claimed rolling code is administered by a call center remote from the vehicle, he does disclose an onboard computer 18 randomly selects the entry sequence required, "forward" or "reverse" in the illustrated embodiment. The onboard computer 18 determines whether the number entered by the driver is the correct number entered in the proper sequence within a given time at 62 (col. 7, lines 21-31). Since Borugian discloses a system that is monitored via a central control 28 in which command signals may be transmitted remotely from the central control (call center) to the vehicle, it would have been obvious to one of ordinary skill in the art at the time of the invention to allow the call center to administer the rolling code, to allow a person at the station to remotely monitor the input code from the driver and determine whether the vehicle should then be disabled.

In reference to claim 23, Borugian discloses the claimed signal is initiated by the driver using a battery operated wireless transmitter, which is met by onboard computer 18 including battery 100 (Fig. 1).

In reference to claim 24, although Borugian does not specifically disclose the claimed method of forcing the engine into an idle mode including serially communicating with a throttle relay, he does disclose a signal to disable the vehicle such as fuel shut-off, ignition disabling (col. 3, lines 54-67; col. 7, lines 58-67; col. 8, lines 1-4). McElroy discloses a central control 102 including input/output ports 128 to collect data from throttle actuator module 118 as well as provide a signal to throttle 118 to disable the vehicle's throttle such that the vehicle slows down. The throttle arm 146 is not operated and the fuel delivered to the engine is sufficient only to sustain an idle (col. 14, lines 32-56). Since both Borugian and McElroy disclose vehicle disabling systems in which a vehicle receives a disabling signal from a remote location, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of communicating with a throttle relay, as disclosed by McElroy, with the system of Borugian, as a well known method of safely disabling the engine of the vehicle and allow the vehicle to idle.

10. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure as follows. Dix (US Pat. 6,677,854 B2) and Wissinger et al. (US Pat. 7,233,814 B2), which disclose vehicle disabling systems.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davetta W. Goins whose telephone number is 571-272-2957. The examiner can normally be reached on Mon-Fri with every other Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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